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EXHIBIT 4 PART 1

66548 U.S. PTO

n6/13/05

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

PATENT

66548 U.S. PTO 90007585



In re U.S. Patent No.: 6,401,824

Inventors: Jeffrey D. Musselwhite

Jeffry C. Ehlinger Jerry P. Allamon Jack E. Miller

Issued: June 11, 2002

Atty. Docket No.: 13137.0231.RXUS00

For: WELL COMPLETION CONVERTIBLE

FLOAT SHOE/COLLAR

REQUEST FOR EXPARTE REEXAMINATION UNDER 37 C.F.R. § 1.510

Mail Stop Ex Parte Reexamination

Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313-1450

- 1. This is a request for ex parte reexamination under 37 C.F.R. § 1.510 of U.S. Patent No. 6,401,824, issued June 11, 2002. This reexamination request is being submitted by a third party requester.
- 2. The name and address of the person requesting reexamination is:

Janelle D. Waack Howrey LLP 750 Bering Drive Houston, TX 77057

- 3. The Commissioner is authorized to charge the fee specified in 37 C.F.R. § 1.20(c)(1) to Deposit Account No. 01-2508, Order No. 13137.0231.RXUS00.
- 4. Any additional fees required under 37 C.F.R. § 1.16-66和大湖 additional fees required under 37 C.F.R.
- 5. A copy of the patent to be reexamined, U.S. Patent No. 6,401,824, in double column format on one side of each sheet is enclosed (Ex. A) as required under 37 C.F.R. § 1.510(b)(4).

EXHIBIT

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In view of the foregoing observations, Requester respectfully submits that the cited references present substantial new questions of patentability for claims 11 through 18 of the '824 patent. Reexamination of all claims in view of the cited references is therefore respectfully requested.

HOWREY LLP 750 Bering Drive Houston, TX 77057-2198 (713) 787-1400

Date: June 13, 2005

Respectfully submitted,

Janelle D. Waack Reg. No. 36,300

CERTIFICATE	A 100	mr. > m, pm, pm, ym, ym,	* * * * * * * * * * * * * * * * * * * *

NUMBER ______EL 381853924

DATE OF DEPOSIT June 13, 2005

I hereby certify that this paper or fee is being deposited with the U.S. Postal Service "EXPRESS MAIL POST OFFICE TO ADDRESSEE" service under 37 C.F.R. 1.10 on the date indicated above and is addressed to: Mail Stop Ex Parte Reexamination, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

- 6. Reexamination of claims 11-18 is requested. Requester acknowledges that if this request for reexamination is granted, all claims will be reexamined.
- 7. A copy of every patent and printed publication relied upon is submitted herewith, including a listing thereof on Form PTO-1449.
- 8. An English translation of all necessary and pertinent foreign language patents and printed publications is enclosed herewith.
- 9. The attached detailed request includes at least the following items:
 - a. A statement identifying each substantial new question of patentability based on prior patents and printed publications (37 C.F.R. § 1.510(b)(1)).
 - b. An identification of every claim for which reexamination is requested, and a detailed explanation of the pertinence and manner of applying the cited art to every claim for which reexamination is requested (37 C.F.R. § 1.510(b)(2)).
- 10. Requester certifies that a copy of this request for reexamination has been served on the owner of U.S. Patent No. 6,401,824 on the date stated below as provided in 37 C.F.R. § 1.33(c). The names and addresses of the parties served are as follows:

Davis-Lynch, Inc. Legal Department 2005 Garden Road Pearland, TX 77581 Taras P. Bemko THE MATTHEWS FIRM 2000 Bering Drive, Suite 700 Houston, Texas 77057

11. Correspondence Address:

Please direct all correspondence concerning this request for reexamination to Customer No. 23369, Howrey LLP. Any telephone calls should be directed to the undersigned at (713) 787-1686.

- 12. U.S. Patent No. 6,401,824 is currently the subject of the following concurrent proceedings:
 - a. Co-Pending Reexamination Request filed December 21, 2004, on behalf of the Assignee Davis Lynch, Inc., and designed U.S. Patent Application Serial No. 90/007.349.

- b. Recently dismissed litigation styled *Davis-Lynch*, *Inc.* v. Weatherford International *Inc.*, Civil Action No. 6:04-CV-54, before Hon. Michael Schneider in the United States District Court for the Eastern District of Texas, Tyler Division.
- 13. Requestor further notes that a request for reexamination of related U.S. Patent No. 6,679,336 (Ex. A1) is being filed concurrently with this request, and that U.S. Patent No. 6,679,336 is also currently the subject of the following concurrent proceedings:
 - a. Co-Pending Reexamination Request filed December 21, 2004, on behalf of the Assignee Davis Lynch, Inc., and designed U.S. Patent Application Serial No. 90/007,350.
 - b. Recently dismissed litigation styled *Davis-Lynch*, *Inc.* v. Weatherford International *Inc.*, Civil Action No. 6:04-CV-54, before Hon. Michael Schneider in the United States District Court for the Eastern District of Texas, Tyler Division.

REQUESTER'S STATEMENT

Reexamination of U.S. Patent No. 6,401,824 ("the '824 patent"; (Ex. A)) is requested under 35 U.S.C. §§ 302-307. The patent has not expired and remains in effect.

I. INTRODUCTION

A. The Claimed Invention of the '824 Patent

Claims 11 through 18 of the '824 patent are generally directed to an oil well completion tool used for lowering a tubular string from a surface position into a wellbore. The tool is generally attached to a lower portion of the tubular string and comprises: (1) an outer tubular member with an open lower end capable of receiving wellbore fluid into the tubular string as it is lowered; (2) flapper valve(s) which, during lowering, are held in the open position thereby allowing wellbore fluid to flow into the tubular string; and (3) an inner tubular member initially secured in a first position such that it holds the flapper valve(s) open during lowering, and thereafter released to a second position so as to allow the flapper valve(s) to close and thereby prevent further fluid flow into the tubular string.

B. The Prosecution History of the '824 Patent

U.S. Patent Application No. 09/524,117 ("the '117 application"), which subsequently issued as the '824 patent, was filed on March 13, 2000. The '117 application originally contained 10 claims all directed to a well completion tool comprising the components listed above, but also including a series of upwardly and downwardly facing fluid jets formed into the outer tubular member. The inner tubular member (described above) functioned to selectively open and close the upwardly and downwardly facing fluid jets. The specification of the '117 application emphasized the desirability of just such a fluid jet assembly in the following excerpt:

It is apparent from the foregoing that it would be highly desirable in optimizing the run in and cementing operation that a float shoe or float collar having jets directed in a downward direction during run in, and then having jets directed only in an upward direction during the cementing operation, would make such an operation much safer, more economical, and more efficient. The float shoe/collar apparatus of the present invention provides just such a reliable, safe and economical system.

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'117 Specification, pg. 4, II. 13-18 (Ex. A2).

Claims 1 through 10 were initially rejected by the Examiner as unpatentable under 35 U.S.C. §§ 102, 103, and 112. In responding to the claim rejections under §§ 102 and 103, Applicants relied heavily on the claimed features of the upwardly facing jets and the downwardly facing jets. Applicants argued that certain prior art cited by the Examiner "has no relationship to the present invention and has neither upwardly facing jets nor downwardly facing jets." Amendment, dated Nov. 2, 2001, pg. 6 (Ex. B). Applicants further argued that other prior art "in no way contemplate[s] either the upwardly facing jets or the downwardly facing jets being opened while the other one is closed." *Id.* at 7.

Prior to another Office Action, a personal interview was held between the Examiner and an attorney for the Applicants. Based upon recommendations from the Examiner received during the interview, the Applicants submitted a Supplemental Amendment further limiting the original claims. As before, Applicants emphasized that certain prior art "does not have ... downwardly facing fluid jet openings as required by amended claim 1" and "downwardly angled jets as per amended claims 2-10." Supplemental Amendment, dated Feb. 14, 2002, pg. 11 (Ex. C).

Also included in the Supplemental Amendment, but not separately addressed by the Applicants, was a series of new claims. These new claims, while directed to a well completion tool nearly identical to that of the original claims, omitted any reference to the use of fluid jets. Following this amendment, and without any comment from the Examiner on the patentability of the newly added claims, the '117 application was allowed. The claims omitting any reference to the use of fluid jets issued as claims 11 through 18.

Subsequently, several months after the issuance of the '824 patent, the Applicants proposed a Certificate of Correction that included the proposed addition of the following sentence to the '824 patent specification: "As a result, the downward movement of the float shoe tube [inner tubular member] 27, with or without jets, switches between a first mode of washing rock cuttings upwardly in the borehole annulus to a second mode of cement distribution in the borehole annulus." (See Request for Certificate of Correction, dated Sept. 4, 2002, pg. 4 (emphasis added) (Ex. D). The Examiner denied this proposed "correction" and declined to add

the sentence in part because it "propose[d] new matter with the addition of the term 'with or without jets.'" Re: Request For Certificate of Correction, dated November 19, 2002 (Ex. E).

II. SUMMARY OF THE GROUNDS FOR THIS REQUEST

Claims 11 through 18 of the '824 patent should be cancelled in view of significant prior art references, most of which were not considered during the original examination. The completion tool disclosed in the '824 patent employs standard configurations that have been in use for decades. No less than eleven prior art references disclose the elements of the devices claimed in the '824 patent, either alone or in combination. Several of these references date back ten years or more. Moreover, ten of these references were never cited to the Examiner in the original examination. Accordingly, each prior art reference, either alone or in combination, presents substantial new questions of patentability for claims 11 through 18 of the '824 patent.

III. CLAIM CONSTRUCTION ISSUES

In order to properly compare claims 11 through 18 of the '824 patent to the prior art references discussed herein, it is first necessary to preliminarily construe some of the claim terms and phrases appearing in the claims at issue.

A. Claim Preambles

The Patentee, in its reexamination request, repeatedly refers to the alleged "use" and "purpose" of the claimed devices to distinguish the claims at issue from the prior art. The alleged "use" and "purpose" of the claimed devices are contained solely in the preambles of claims 11 through 18. The Patentee's reliance on the preamble as a limiting claim element is improper.

The preamble of a claim may be regarded as a "claim element" and therefore limiting if it "recites essential structure or steps, or if it is necessary to give 'life, meaning, and vitality' to the claim." *Intirtool, Ltd. v. Texar Corp.*, 369 F.3d 1289, 1295 (Fed. Cir. 2004) (quotation marks omitted) (quoting *Pitney Bowes, Inc. v. Hewlett-Packard Co.*, 182 F.3d 1298, 1305 (Fed. Cir. 1999)). However, the preamble is generally *not limiting* if the body of the claim "describes a structurally complete invention such that deletion of the preamble phrase does not affect the

structure or steps of the claimed invention." Id. (quotation marks omitted) (quoting Catalina Mktg. Int'l, Inc. v. Coolsavings.com, Inc., 289 F.3d 801, 808-09 (Fed. Cir. 2002)). Thus, where:

the body of the claim fully and intrinsically sets forth the complete invention, including all of its limitations, and the preamble offers no distinct definition of any of the claimed invention's limitations, but rather merely states, for example, the purpose or intended use of the invention, then the preamble is of no significance to claim construction because it cannot be said to constitute or explain a claim limitation.

Pitney Bowes, 182 F.3d at 1305 (emphasis added).

The respective preambles of the following independent claims of the '824 patent, with relevant portions highlighted, are reproduced as follows:

Claim 11: "A float equipment assembly for lowering a tubular string from a surface position into a wellbore and for cementing said tubular string in position ..."

Claim 14: "Float equipment for lowering a tubular string from a surface position into a wellbore and for cementing said tubular string in position ..."

Claim 16: "Float collar/shoe equipment for use in lowering a tubular string into a wellbore and for cementing the tubular string in position ..."

Each one of the preambles above provides no more than an intended use or purpose for the respective inventions – e.g., an apparatus "for lowering a tubular string" and "for cementing the tubular string." The "bodies" of those claims, independently of their respective preambles, provide "structurally complete inventions." See Rowe v. Dror, 112 F.3d 473, 478 (Fed. Cir. 1997). Accordingly, the preambles above are not claim limitations and therefore should not be considered by the Examiner in comparing claims 11 through 18 of the '824 patent to the prior art references discussed herein.

B. "Tubular String"

The Patentee, in its reexamination request, repeatedly refers to the claimed devices as being attached to "casing," and argues that some of the prior art references discussed herein are not attached to "casing" and are therefore non-analogous art. The term "casing" does not appear in claims 11 through 18 of the '824 patent. Rather, the claims refer to a "tubular string."

To one of ordinary skill in the art, the term "tubular string" has an ordinary and accustomed meaning. Giving this term its ordinary and accustomed meaning based on the plain language of the claims, the "tubular string" limitation refers to any string of tubing, including, but not limited to, casing.

Because the language is clear on its face, the disputed term maintains its "ordinary and accustomed" meaning as understood by one of ordinary skill in the art. *Tate Access Floors, Inc.* v. Maxcess Techs., Inc., 222 F.3d 958, 965 (Fed. Cir. 2000). "Dictionaries, encyclopedias and treatises are particularly useful resources to assist the court in determining the ordinary and customary meaning of claim terms." Texas Digital Sys., Inc. v. Telegenix, Inc., 308 F.3d 1193, 1202 (Fed. Cir. 2002).

A standard oilfield dictionary refers to the term "tubular" as a "tubular good" and defines that term as "[a]ny kind of pipe Oil-field tubular goods include tubing, casing, drill pipe, and line pipe." A DICTIONARY OF PETROLEUM TERMS 115 (2nd ed. 1979) (Ex. F). An oilfield treatise carries the exact same definition. See A PRIMER OF OILWELL DRILLING 191 (6th ed. 2001) (Ex. G). Still another oilfield dictionary reiterates this definition, stating that the term "tubular goods" includes "[w]ell casing, tubing, drillpipe, drill collars, and line pipe." HANDBOOK OF OIL INDUSTRY TERMS & PHRASES 290 (5th ed., 1994) (Ex. H). Accordingly, based on the ordinary and accustomed meaning of the term "tubular string" as understood by one of ordinary skill in the art (as evidenced by the dictionary and treatise quotations above), the proper construction of the term is any string of tubing, including, but not limited to, a string of casing.

The Patentee's apparent construction of the term "tubular string" as only including casing is self-serving and an improper application of the canons of claim construction. Patent owners are free to use claim language of their choosing, but they must live with the language they choose. The Federal Circuit has noted this, stating:

If [the patent owner], who was responsible for drafting and prosecuting the patent, intended something different, it could have prevented this result through clearer drafting.... It would not be appropriate for us now to interpret the claim differently just to cure a drafting error made by [the patent owner]. That would unduly interfere with the function of claims in putting competitors on notice of the scope of the claimed invention.

Hoganas AB v. Dresser Indus., Inc., 9 F.3d 948, 951 (Fed. Cir. 1993).

As stated above, patent owners are free to use claim language of their choosing – the Patentee chose the term "tubular string." To one of ordinary skill in the art, that term has an ordinary and accustomed meaning. Giving the term its ordinary and accustomed meaning as evidenced by the dictionary and treatise quotations above, the "tubular string" limitation is properly construed as any string of tubing, including, but not limited to, a string of casing.

IV. CLAIMS FOR WHICH REEXAMINATION IS REQUESTED

Reexamination of claims 11 through 18 of the '824 patent is requested in view of the following references and combinations of references, each of which independently presents a substantial new question of patentability such that reexamination is appropriate.

- 1. Prior Art Reference 1 (Ex. I): P. Head, Slimwells Without The Pain, SPE/IADC 52795 (1999), either alone or further in view of one or more of the subsequent references.
- Prior Art Reference 2 (Ex. J): P. Head, Slimwell Concept Innovative Coiled Tubing Completion Technology, SPE 54492 (1999), either alone or further in view of one or more of the preceding or subsequent references.
- 3. Prior Art Reference 3 (Ex. K): "Assembly for Flapper Valve Insert for Sub-Sea Reentry Cement Float Shoe with TV Camera for XO-07238," Baker Commodity Number 02-35733-00 (dated January 23, 1976), either alone or further in view of one or more of the preceding or subsequent references.
- 4. Prior Art Reference 4 (Ex. L): "Proposed 24 ½ O.D. Stab-In Circulating Flexifill with Double Flapper Valve & Captive Ball (F/BP)" (dated June 25, 1984), either alone or in combination with one or more of the preceding or subsequent references.
- 5. Prior Art Reference 5 (Ex. M): "3.500 O.D. Dual Flapper Valve" assembly including sub-assembly drawings entitled "Top Sub," "Upper Flapper Body," "Lower Flapper Body," "Flapper Assembly," "Bottom Sub," "Pin," "Flapper Pin Housing," "Shear Body," "Trap Body," "Sleeve," "Shear Ring," "Lock Ring," "Flapper Valve," and "Dual Flapper Valve," (Taylor Made Oil Tools, Inc. dated July 7, 1997), either alone or in combination with one or more of the preceding or subsequent references.

- 6. Prior Art Reference 6 (Ex. N): "2 1/2" Cement Retainer Assembly," HPI High Pressure Integrity, Inc., Part No. 351-250-1 (dated September 8, 1994), either alone or further in view of one or more of the preceding or subsequent references.
- 7. Prior Art Reference 7 (Ex. O): United States Patent No. 3,148,731 issued to Holden on September 15, 1964, in view of any of Prior Art References 1 through 6 above.
- 8. Prior Art Reference 8 (Ex. P): United States Patent No. 6,125,930 issued to Moyes on October 3, 2000 (35 U.S.C. § 102(e) priority date of January 26, 1998), in view of any of Prior Art References 1 through 6 above.
- 9. Prior Art Reference 9 (Ex. Q): United States Patent No. 6,296,059 issued to Leeb et al., on October 2, 2001 (35 U.S.C. § 102(e) priority date of March 23, 1999), in view of any of Prior Art References 1 through 6 above.
- 10. Prior Art Reference 10 (Ex. R): United States Patent No. 6,390,200 issued to Allamon et al., on May 21, 2002 (35 U.S.C. § 102(e) priority date of February 4, 2000), in view of any of Prior Art References 1 through 6 above.
- 11. Prior Art Reference 11 (Ex. S): United States Patent No. 6,467,546 issued to Allamon et al., on October 22, 2002 (35 U.S.C. § 102(e) priority date of February 4, 2000), in view of any of Prior Art References 1 through 6 above.

It is unclear at this time whether Prior Art References (3) through (6) qualify as "printed publications" and are therefore proper references for a reexamination request under 37 C.F.R. § 1.501, et al. However, as Prior Art References (3) through (6) were included in the Patentee's request for reexamination, and were therein mischaracterized by the Patentee, they have been included in this request in order to accurately portray their respective disclosures.

None of the prior art references identified above, with the exception of Prior Art Reference 7, were of record during examination of the '824 patent. Accordingly, each prior art reference and/or combination of prior art references presents a substantial new question of patentability.

IV. DETAILED EXPLANATION OF PERTINENCE AND MANNER OF APPLYING THE CITED REFERENCES TO THE CLAIMS FOR WHICH REEXAMINATION IS REQUESTED

Although the pertinence of the cited references will be apparent from the following summaries, a full explanation of the application of these references to the claims is provided below in the form of a claim chart. Many of the following summaries include representative figures from the references that have been annotated with color to identify the components corresponding to the claimed invention of the '824 patent.

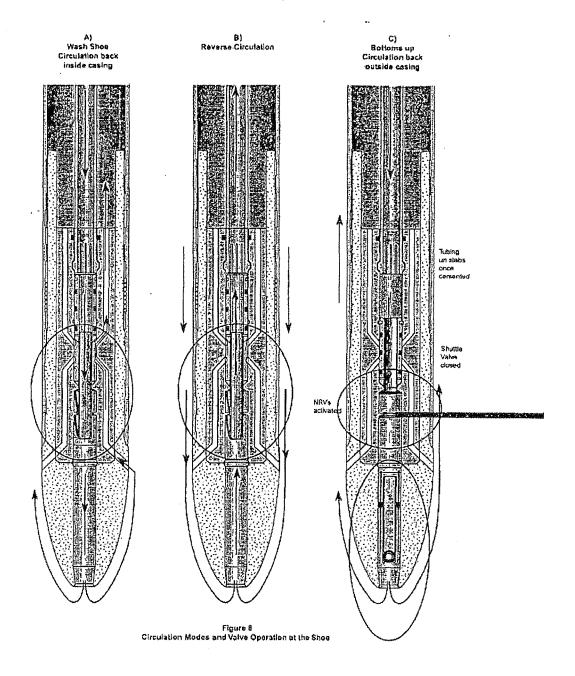
A. Brief Descriptions Of Cited References

1. Prior Art Reference (1) and (2)

Prior Art References (1) and (2) correspond to two SPE articles respectively entitled "Slimwells Without the Pain," and "Slimwell Concept – Innovative Coiled Tubing Completion Technology." Prior Art References (1) and (2) each disclose a liner running tool and a float collar/shoe assembly that were developed to overcome the problems associated with surge pressure while running a tubular string into "slim" wellbores. (See Ex. I, pgs. 1-2; Ex. J, pgs. 1-2). The structure and operations of the float collar/shoe assembly is described, in part, as follows:

[O]nce the liner has reached the necessary setting depth, a ball is dropped which lands and seats on the sleeve retaining the shuttle valve in its circulation position and keeping the non-return valves open. Internal pressure is applied from surface and, at a predetermined pressure shear pins are activated which allow the shuttle valve to move to the closed position. The sleeve continues moving downwards where it is stored in a catcher sub. This process allows dual non-return valves to become active for the cementing operation.

(See Ex. I, pg. 3; Ex. J, pg. 3). The configuration and operation described above is illustrated and highlighted in the following figures from page 11 of Prior Art Reference (1):



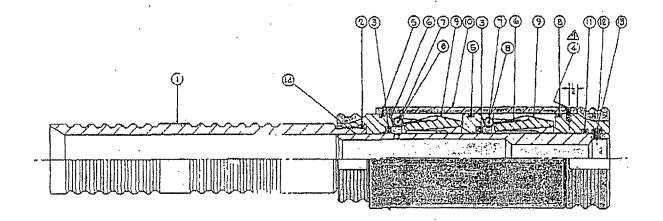
As the description and the figures above demonstrate, Prior Art References (1) and (2) each independently disclose a float collar/shoe assembly comprising an outer tubular member connected to a tubular string, an inner tubular member contained within the outer tubular, and

dual flapper valves initially held open by the inner tubular member, and subsequently releasable to allow the flapper valves to close. The movement of the inner tubular member controls the flow of fluid through the tubular string by converting the float collar/shoe from a two-way flow mode to a one-way flow mode.

The movement of the inner tubular is accomplished by dropping a ball from the surface. The ball lands within a ball seat formed into the inner tubular member. Fluid pressure acts on the ball to break shear pins and move the inner tubular member from a first position to a second position, thereby manipulating the flow of fluid through the tubular string as described above. Prior Art References (1) and (2) independently contain each and every element of claims 11 through 18, arranged as stated in those claims. Moreover, Prior Art References (1) and (2) were designed for the express purpose of "preventing/controlling surge pressures, which the [Patentee's] device seeks to resolve." Patentee's Reexamination Request, pg. 8. Accordingly, claims 11 through 18 are anticipated and should be cancelled from the '824 patent.

2. Prior Art Reference (3)

Prior Art Reference (3), entitled "Assembly for Flapper Valve Insert for Sub-Sea Reentry Cement Float Shoe with TV Camera for XO-07238," discloses a cement float shoe insert comprised of an outer tubular member (shown in green) affixed to a tubular string, an inner tubular member (shown in pink) positioned within the outer tubular member, and two flapper valves (shown in yellow) positioned between the inner tubular member and the outer tubular member. The inner tubular member is initially positioned within the outer tubular member such that it simultaneously extends through both flapper valves and maintains both in an open position.



In use, the cement float shoe insert of Prior Art Reference (3) would have aided in running a tubular casing string from a surface position into a wellbore, and thereafter would have been utilized to cement the tubular casing string therein. See Declaration of David G. Calvert, \(\) 11 (Ex. T). More particularly, once the cement float shoe insert was attached to the tubular string, the entire assemblage would have been lowered into a wellbore. Id. at 12. As it was lowered, existing wellbore fluid would have flowed inwardly into the tubular string through the inner tubular member. Id. Because the flapper valves, when activated, permit fluid flow in only in a downward direction, it was necessary to hold the flapper valves in an open position while the assembly was being lowered. Id.

Once lowered to the correct depth, the inner tubular member of the cement float shoe insert would have been removed from contact with the two flapper valves such that the flapper valves would be activated to open in response to a flow of fluid from the surface, but to remain closed in response to fluid flow toward the surface. *Id.* at 13. The inner tubular member would be removed by dropping a restriction device (i.e., a ball or dart) from the surface to the tubular. *Id.* Pump pressure would thereafter be applied to the restriction device to break a shear member (shown in purple) and remove the inner tubular member from the float shoe, *Id.*

The Patentee, in its own reexamination request, described the disclosures of Prior Art Reference (3) as follows:

[Prior Art Reference 3] apparently disclose[s] a device somewhat similar to the device of the '824 patent by having a pair of flapper valves positioned between an inner tubular member and an outer tubular member. Further the inner tubular member is initially positioned such that it extends through the pair of flapper valves and maintains them in an open position. Still further the inner tubular member can be selectively moved to a second position thereby allowing the flapper valves to move to a closed position.

Patentee's Reexamination Request, pg. 7. However, despite this statement, the Patentee claims that Prior Art Reference (3) "neither teach[es], disclose[s], suggest[s], nor even contemplate[s] the structure or the functions of the [Patentee's] device." *Id.* at 8.

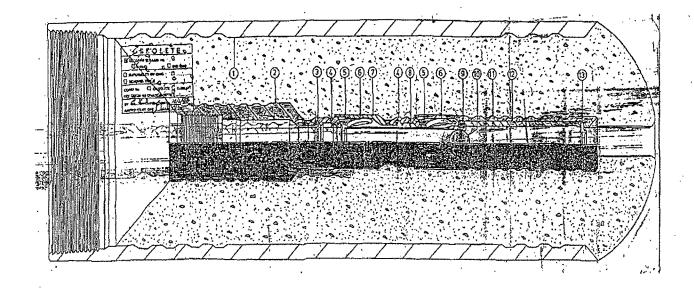
The Patentee argues that the tool disclosed in Prior Art Reference (3) is designed for gaining re-entry to a sub-sea wellbore using a TV camera, while the invention of the '824 patent is designed for use in well completions where it is undesirable to put excess pressure on the wellbore. The Patentee's argument is misplaced. Claims 11 through 18 of the '824 patent are apparatus claims directed to a device with discreet components arranged in a specific manner—the intended use of such a device is irrelevant. For purposes of an anticipation analysis under 35 U.S.C. § 102, the only consideration is whether a prior art reference contains each and every element of the claim at issue, arranged as stated in the claim. See Sandt Tech. Ltd. v. Resco Metal And Plastics Corp., 264 F.3d 1344, 1350 (Fed. Cir. 2001). By the Patentee's own admission above, Prior Art Reference (3) contains each and every element of claims 11 through 18, arranged as stated in those claims. Accordingly, claims 11 through 18 of the '824 patent are anticipated and therefore should be cancelled from the '824 patent.

Even if the Patentee's arguments as stated in its reexamination request were statutorily proper, they cannot be given any weight. For example, the Patentee makes inconclusive and unsupported statements regarding the possible location and purpose of a TV camera that is not present in Prior Art Reference (3). The Patentee states that "[t]he position of the T.V. camera is not shown, but ... would presumably prevent or frustrate the claimed two-way fluid flow." Patentee's Reexamination Request, pg. 8 (emphasis added). The Patentee offers no support for its claims regarding the functionality of the tool disclosed in Prior Art Reference (3). Rather, the Patentee makes self-serving deductions and conclusions that cannot be given serious consideration.

In contrast, the statements regarding the structure and operation of the tool disclosed in Prior Art Reference (3) contained in this reexamination request are supported by expert testimony. See Declaration of David G. Calvert (Ex. T). Therefore, they are entitled to greater deference and clearly demonstrate that claims 11 through 18 are anticipated and should be cancelled from the '824 patent.

3. Prior Art Reference (4)

Prior Art Reference (4) entitled "Proposed 24 ½ O.D. Stab-In Circulating Flexifill with Double Flapper Valve & Captive Ball (F/BP)" discloses a cement float shoe comprising two flapper valves (shown in yellow) contained within an outer tubular assembly (shown in green). A hollow inner tubular (shown in pink) extends through and covers the bores of both flapper valves to maintain the flapper valves in the open position. As illustrated, the inner tubular member prevents the flapper valves from operating. Thereby, fluid may flow in both directions through the bore of the inner tubular (and therefore the float shoe). See id.



In use, the cement float shoe disclosed in Prior Art Reference (4) is attached to a tubular casing string. Ex. T, ¶ 19. Once attached, the apparatus generally aids in running the tubular casing string from a surface position into a wellbore, and thereafter is utilized to cement the

tubular casing string within the wellbore. *Id.* More particularly, once the cement float shoe disclosed in Prior Art Reference (4) is attached to the tubular string, the entire assemblage is lowered into the wellbore. *Id.* at 20. As it is lowered, existing wellbore fluid flows inwardly into the tubular string through the inner tubular. *Id.* Since the flapper valves when activated permit fluid flow only in a downward direction, it is necessary to hold the flapper valves in an open position while the assembly is being lowered. *Id.*

Once lowered to the correct depth, the inner tubular is removed from contact with the two flapper valves such that the flapper valves are activated to open in response to a flow of fluid from the surface, but to remain closed in response to fluid flow toward the surface. *Id.* at 21. The inner tubular is removed by dropping a restriction device (i.e., a ball or dart – shown in blue) from the surface to the inner tubular. *Id.* at 22. Pump pressure is then applied to the restriction device to break a shear member (shown in purple) and to remove the inner tubular from the float shoe. *Id.* Alternatively, the restriction device may be mounted adjacent to the inner tubular member while on the surface, and the entire assembly may then be lowered to the desired depth with the restriction member in place. *Id.* Pump pressure would then be applied to dislodge the restriction device and remove the inner tubular. *Id.*

The Patentee, in its own reexamination request, described the disclosures of Prior Art Reference (4) as follows:

[Prior Art Reference (4)] apparently discloses a device somewhat similar to the device of the '824 patent by having a pair of flapper valves 6 positioned between an inner tubular member 8 and an outer tubular member. The inner tubular member is initially positioned such that it apparently extends through the pair of flapper valves and maintains them in an open position. Still further the inner tubular member may be selectively moved to a second position thereby allowing the flapper valves to move to a closed position.

Patentee's Reexamination Request, pg. 10. As before, despite this statement, the Patentee claims that Prior Art Reference (4) "does not teach, disclose, suggest, nor even contemplate the [Patentee's] device." *Id.*

The Patentee argues that the restriction device, in this case a ball, is permanently located within the inner tubular member, and that this arrangement, in concert with other components, prohibits the flow of fluid through the inner tubular member in either direction. Specifically, the Patentee claims:

[T]he closely fitting ball 10 and inner tubular member 9 and stops are apparently intentionally designed to block and/or frustrate two-way fluid flow through the tool Moreover, the device includes additional fluid restrictive elements mounted therein such as elements [sic] 3 and items [sic] 13. It should be noted that the ball 10 is a captive ball as described in the title and could not be dropped from the surface ... because of the same radially inwardly extending shoulder provided at the top of the inner tubular member ... and/or because of element 3.

Id. at 11.

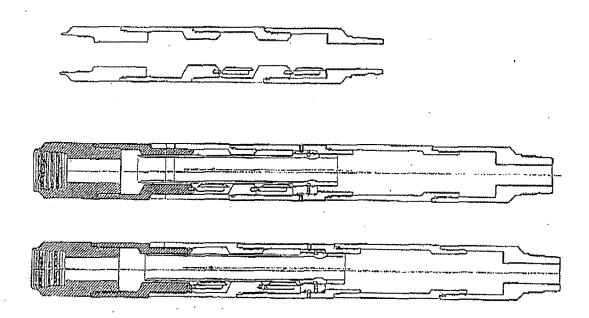
Again, the Patentee's statements are unsupported and self-serving. The ball is not trapped within the inner tubular as the Patentee suggests, but rather is shown in the seated position. The tool disclosed in Prior Art Reference (4) is not a technical schematic drawn to scale – it is in a class of "Illustrative Drawings of Special Tools and Methods." Therefore, the dimensions, clearances, and tolerances of the various components cannot be realistically ascertained. Further, the Patentee's argument negates the very purpose of the self-titled "circulating" float shoe disclosed in Prior Art Reference (4). If the flow path through the inner tubular is blocked to fluid moving toward and away from the surface, there can be no "circulation."

With regard to the Patentee's reference to additional "fluid restrictive elements," the numerals corresponding to those elements are not titled. The Patentee is taking the self-described "fluid restrictive elements" and "inwardly extending shoulder[s]" that are unlabeled in Prior Art Reference (4) and improperly fabricating their purpose for the Patentee's own advantage. In contrast, the statements regarding the structure and operation of the tool disclosed in Prior Art Reference (4) contained in this reexamination request are supported by expert testimony. See Declaration of David G. Calvert (Ex. T). Therefore, they are entitled to greater deference and clearly demonstrate that claims 11 through 18 are anticipated and should be cancelled from the '824 patent.

4. Prior Art Reference (5)

Prior Art Reference (5) collectively entitled "3.500 O.D. Dual Flapper Valve" discloses an outer tubular member affixed to a tubular string, an inner tubular member (shown in pink) positioned within the outer tubular member and moveable between a first and second position with respect to the outer tubular member, and two flapper valves (shown in red) positioned

between the inner tubular member and the outer tubular member. See Declaration of Arthur Keith McNeilly, ¶ 23 (Ex. U). The flapper valves are one-way valves, each one comprised of a spring-biased flapper closure element and a valve seat. Id.



The inner tubular member is initially positioned within the outer tubular member such that it simultaneously extends through both flapper valves and maintains both closure elements in an open position such that fluid may flow through the flapper valves in two directions. *Id.* at 24. The outer tubular member has an open lower end that permits fluid to flow from the well bore into the inner tubular member during the lowering of the tubular string into the well bore. *Id.* at 25.

In operation, the outer tubular member is attached to a tubular string and the entire apparatus is lowered into a well bore. *Id.* at 26. Both flapper valves, located within the outer tubular member, are held in the open position by the inner tubular member that extends through the flapper valves. *Id.* As the assembly is lowered, fluid from the well bore is able to flow into the assembly through the inner tubular member. *Id.* at 27. Once the assembly is correctly positioned, the inner tubular member is removed such that both flapper valves will pivot open in response to a flow of fluid from the surface, and are otherwise in a closed position to prevent flow of fluid towards the surface. *Id.*